

RE: Correct Powerpoint version

Ernest Alaniz to: Ray Leissner, vkelley

Cc: Wren Stenger, Stacey Dwyer, Edwina Rymer, "goliad county"

From: "Ernest Alaniz" <ernest.alaniz@gmail.com>

To: Ray Leissner/R6/USEPA/US@EPA, <vkelley@intera.com>

Cc: Wren Stenger/R6/USEPA/US@EPA, Stacey Dwyer/R6/USEPA/US@EPA, Edwina

Rymer/R6/USEPA/US@EPA, "'goliad county" <gcgcd@goliadcogcd.org>

Thanks Ray. I will distribute to the Goliad Ground Water Commission.

As a drilling engineer currently residing in Goliad County, I would like to add some of my concerns that may not have been considered.

1. To me, the real danger is in the injection wells. At the depth we are considering for the project, the fracture gradients will be very low. I have not seen the pressure plots on the injection well, but any small increase in pressure caused by plugging will surely fracture the formation and redirect the injection fluids. A quick calculation at 100' and 100 psi injection pressure, shows the 100 psi equals the overburden pressure. Add the hydrostatic pressure of water - the formation will surely be fractured, and there is no control of where the injection fluid will go – up, down, or away from the production well. An injection test in selected areas would tell us more about the communication between aquifers than would a pump test like we are currently doing.

08/17/2012 09:35 AM

2. It is not surprising that none of the previous projects have not been able to return an aquifer to the original level. One, for the reason above, and two, because there is no way mother nature would have laid out a completely homogeneous sand body. Any small impermeability barrier would have redirected the injection fluids away from a straight line to the production well. Working offshore, we were required to use the Best Available and Safest Technology (BAST). We used High Resolution Seismic to be able to "see" the shallow horizon and be able to identify shallow hazards, then plan our drilling programs to mitigate the hazards. I feel this technology would help us model the aquifer more accurately.

Considering the consequences, I feel anything that will that can mitigate the possibility of contamination should be considered.

Thanks, and forgive my adding more fuel to the fire. I have some strong feeling based my experiences. I do not envy the EPA's position.

Ernest Alaniz

From: Ray Leissner [mailto:Leissner.Ray@epamail.epa.gov]

Sent: Thursday, August 16, 2012 4:05 PM

To: vkelley@intera.com; ernest.alaniz@gmail.com Cc: Wren Stenger; Stacey Dwyer; Edwina Rymer

Subject: Correct Powerpoint version

Sorry.

I sent you a draft version a few minutes ago. Here's the right one.

Ray Leissner, Env. Eng. Ground Water / UIC Section (6WQ-SG) (214) 665 - 7183 USEPA, Region 6

The FIRST STEP in protecting your ground water is to have your well tested.